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APPLICATION NO	).	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,761	01/09/2004		William Roy BURKE	05111.0102.DVUS03	1760
. 22446	7590	12/14/2004		EXAM	INER
ICE MILI		OLIA DE	RAO, G NAGESH		
ONE AMI BOX 8200		QUAKE	ART UNIT	PAPER NUMBER	
INDIANA	POLIS, IN	N 46282	1722		
				DATE MAILED: 12/14/2004	1

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
•	10/707,761	BURKE, WILLIAM ROY
Office Action Summary	Examiner	Art Unit
	G. Nagesh Rao	1722
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	vith the correspondence address
A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATIO  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a  - If NO period for reply is specified above, the maximum statutory per Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b).	N. R. 1.136(a). In no event, however, may a reply within the statutory minimum of this riod will apply and will expire SIX (6) MO atute, cause the application to become A	reply be timely filed  rty (30) days will be considered timely.  NTHS from the mailing date of this communication.  BANDONED (35 U.S.C. & 133)
Status		
1) Responsive to communication(s) filed on 1/	9/04.	
	his action is non-final.	
3) Since this application is in condition for allow closed in accordance with the practice under		
Disposition of Claims		·
<ul> <li>4)  Claim(s) 1-13 is/are pending in the application 4a) Of the above claim(s) is/are withded</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-13 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and</li> </ul>	Irawn from consideration.	
Application Papers		
9) The specification is objected to by the Examination 10) The drawing(s) filed on <u>09 January 2004</u> is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction. The oath or declaration is objected to by the	re: a) □ accepted or b) ☑ che drawing(s) be held in abeyarection is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority application from the International Bure * See the attached detailed Office action for a limit	ents have been received. ents have been received in Ariority documents have been eau (PCT Rule 17.2(a)).	pplication No. <u>60/139183</u> . received in this National Stage
Attachment(s)		•
Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date 1/9/04.	Paper No(s	Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152)

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## **Drawings**

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the intended apparatus as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). The drawings do not clearly indicate the invention in its fullest form and leads to confusion as to how certain elements can be adequately claimed, for example the dimensions of the die claimed can not be properly verified, nor the distinction between the mixer and extruder elements.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement

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Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-6 rejected under 35 U.S.C. 102(b) as being anticipated by Shepherd (U.S. Patent No. 5,256,222).

Shepherd 222 teaches building a material board and a method of manufacturing the material through an apparatus that reads on claimed invention.

With respect to claim 1 Shepherd 222 teaches to construct an apparatus comprising a mixer (figure 3 element 24), a feed hopper that reads on extrusion die containing a die inlet, die exit, a means for communicating with the mixer, and multiple inlets attached to the mixer (figure 3, elements 32, 26, 28, 30), a conveyor

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belt system that reads on flat movable surface (column 5 lines 61-68 and column 6 lines 1-24), and a dryer (figure 3 element 72).

With respect to claim 4 the material has a positive displacement flow in the mixer since it is being led out an extruder onto the conveyor belt for further processing.

With respect to claim 5 the mixer (figure 3 element 24) comprised of more than one conduit ports as seen in figure 3 elements 26, 28, and 30.

With respect to claim 6 it appears in figure 3 of Shepherd 222 that the feed hopper, which reads on as a type of extruder, has a die exit with a rectangular cross section.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.

- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 3. Claims 2-3 rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd (U.S. Patent No. 5,256,222) in view of Chihara (U.S. Patent No. 5,505,771).

Shepherd 222 teaches a mixer "...may be of any suitable type as long as it is capable of thoroughly mixing the various ingredients without destroying the integrity of the expanded perlite particles. Preferably, it would be a low-to-moderate shear horizontal paddle or ribbon type mixer..."

Chirara 771 teaches a dental gypsum composition, where it is taught using a mixer, whether it be a twin or single screw mixer, could be utilized to process gypsum materials (column 3 lines 15-25).

Thus it would be obvious to one skilled in the art to modify the mixer of Shpherd 222 to entail the single or twin screw mixer of Chirara 771 for enhanced mixing of the gypsum material.

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4. Claims 1-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd (U.S. Patent No. 5,256,222) in view of taking Official Notice. See in re Dailey 149 USPQ 47 CCPA 1976 in Chapter 2100 of the MPEP (2144.04).

It is obvious to want the material extruded into flat sheets, as mentioned in the prior art of Shepherd since it would be on the spot ready made material as drywall and plaster for walls. See column 8 lines 44-54, where an example of the dimensions for the plasterboard are discussed and read upon claimed values. Furthermore the rectangular flat sheets are the result of an effective variable and can be processed in various shapes and sizes as denoted by its use prevalent use in the building industry.

6. Claim 11-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd (U.S. Patent No. 5,256,222) in view of Honda (U.S. Patent No. 4,569,715).

Honda 715 teaches a plywood manufacturing method and apparatus which is in a similar art with the Shepherd 222 apparatus, and in the specification it teaches the use of a convection and microwave dryer for drying the material (column 9 lines 5-20), and therefore it would be obvious to modify the Shepherd 222 dryer to

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entail a microwave or convection dryer for the purpose of a rapid heat dry for the gypsum material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to G. Nagesh Rao whose telephone number is (571) 272-2946. The examiner can normally be reached on 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Utech can be reached on (571) 272-1137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**GNR** 

MICHAEL P. COLAIANNI SUPERVISORY PATENT EXAMINER